

WHAT IS CLAIMED IS:

1. An image process device including an image process unit and a system control unit,
wherein

5 the image process unit comprises:

an image input interface that receives inputs of image data from an image input device;

data packet generating means for generating data packets from image data;

10 first packet transfer means for transferring the data packets to the system control unit; and

an image output interface that outputs image data to an image output device,

15 the system control unit comprises:

memory control means for having a memory store the data packets transferred from the image process unit and reading out the data packets from the memory; and

20 second packet transfer means for transferring the data packets to the image process unit, and

the first and second packet transfer means transfer packets using mutually different connection
25 paths between the system control unit and the image process unit.

2. The image process device according to claim 1, wherein the system control unit and the image process unit are configured on mutually different semiconductor substrates.

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3. The image process device according to claim 1, wherein the system control unit further comprises command packet generating means for generating command packets to control operations of the image process unit in accordance with user's manipulations and transfers the command packets to the image process unit by using the second packet transfer means.

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4. The image process device according to claim 1, wherein the image process unit further comprises interrupt packet generating means for generating interrupt packets to notify the system control unit of an interrupt, and transfers the interrupt packets to the system control unit by using the first packet transfer means.

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5. The image process device according to claim 1, wherein

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the data packet generating means comprises:

raster rectangle conversion means for converting raster image data into plural pieces of

rectangle image data;

means for generating an page ID that
specifies a page of the image data; and

means for generating positional data that
5 specifies a position of the rectangle image data, and

the data packet includes at least the page ID,
the positional data, and the rectangle image data.

6. The image process device according to claim
10 5, wherein

the image process unit further comprises:

means for extracting the rectangle image
data from the data packets; and

rectangle raster conversion means for
15 converting the plural pieces of rectangle image data
into the raster image data in accordance with the
page ID and the positional data.

7. The image process device according to claim
20 5, wherein the image process unit further comprises
rectangle image process means for processing the
rectangle image data.